ATTACHMENT 4

EVALUATION CRITERIA

ACCELERATED STRATEGIC COMPUTING INITIATIVE

(ASCI)

C6939RFP6-3X

LOS ALAMOS NATIONAL LABORATORY

LOS ALAMOS, NEW MEXICO

1. General

It is the University's intent to select the responsible Subcontractor whose technically qualified proposal, submitted in the form required by this solicitation document, is that in the judgment of the University will result in the best overall value to the University. Subcontractor selection will be solely the decision of the University, and the right is reserved by the University, without qualification, to reject any and all proposals, to waive informalities and minor irregularities in proposals, and to negotiate with any and all Offerors who submit them.

2. Selection Process

The University's selection process will be conducted by a panel of reviewers which will:

- Determine Technical Compliance of submitted proposals;
- Evaluate Technical Excellence of qualified proposals;
- Analyze Overall Price;
- Adjudge Vendor Responsibility; and
- Recommend to the Source Selection Official a Final Selection of a responsible offeror based on a combined assessment of Technical Excellence and Overall Price evaluations.
- The final selection will be made by the Source Selection Official

3. Unacceptable Proposals

The University will determine whether or not each proposal satisfies the requirements of the solicitation. Any proposal not meeting the Technical Qualification criteria (see paragraph 4 below) will be eliminated from further consideration. The University may also eliminate proposals from further consideration before the initial evaluation if the proposal is so grossly and obviously deficient as to be totally unacceptable on its face. For example, a proposal may be eliminated when the proposal does not represent a reasonable initial effort to address the essential requirements of the solicitation, or clearly demonstrates that the Offeror does not understand the requirements of the solicitation.

4. Minimum Technical Qualification

For each proposal, determination of Technical Qualification will be based on a review of the point-by-point responses to the mandatory requirements (MR and MO paragraphs) identified in the Statement of Work. If an Offeror does not meet **all** the Mandatory and Mandatory Option requirements their proposal will not be evaluated further.

5. Evaluation of Technical Excellence

Evaluation of the technical excellence of technically qualified proposals will be a qualitative assessment. Each technically qualified proposal will be evaluated using the following factors, listed in descending order of importance: Technological Approach (what), Milestone Schedule (when), and Management Approach (how).

I. Technological Approach

This evaluation factor deals with "what" will be delivered. Within Technological Approach, the following factors will be evaluated: A) Sustained Stewardship TeraFLOP System; B) Soundness of Technical Approach; and C) Initial Delivery System. Factors A and B are approximately equal with C being of less importance.

A. Sustained Stewardship TeraFLOP System

The Sustained Stewardship TeraFLOP system is the culmination of the accelerated delivery effort. The following factors will be evaluated. They are listed in descending order of importance with factors 3 and 4 being of approximately equal importance.

1. Relevance to Technical Requirements

How well the Offeror's proposed Sustained Stewardship TeraFLOP system meets the Sustained Stewardship TeraFLOP target requirements will be evaluated.

2. Clustering Environment

The single system image and code development tools for clustered SMPs will be evaluated for the proposed Sustained Stewardship TeraFLOP system.

3. Hierarchical Memory Model

The memory hierarchy model the Offeror proposes will be evaluated in terms of its impact on applications programming and the potential for sustained performance.

4. Code Development Model

The code development and execution model will be evaluated as the prime indicator of system usability and potential performance on ASCI applications.

5. Operational Environment

The operational environment will be evaluated on the expected Sustained Stewardship TeraFLOP system's reliability, availability and serviceability capabilities. Also evaluated will be the proposed system administration, fault tolerance and containment features and mechanism for migrating between classified and unclassified modes.

B. Soundness of Technical Approach

The technological approach will be reviewed to assess the capability of the Offeror to actually accelerate the delivery of the proposed Sustained Stewardship TeraFLOP system

with the proposed technology. The following factors are of approximately equal importance.

1. Hardware Technology Path
The Offeror's hardware technology path will be evaluated on the technical merit of the approach.

2. Technology Refresh
This evaluation will examine the offered hardware and software refresh technologies and the proposed delivery schedule.

3. Software Technology Path
The Offeror's software technology path will be evaluated on the technical merit of the approach.

4. Alignment with Corporate Business Plan
The proposed technical approach will be evaluated based on its alignment with and acceleration of the Offeror's planned development of commercial products.

C. Initial Delivery System
This is the starting point of the long march toward the Sustained Stewardship TeraFLOP The following factors, listed in descending order of importance, will be evaluated.

1. Appropriateness as a Development Starting Point
The evaluation will consider how closely the hierarchical memory programming model, hardware and software of the proposed Initial Delivery system conform to the proposed Sustained Stewardship TeraFLOP

2. Code Development Environment
The proposed code development tools and their relevance to ASCI applications development will be evaluated.

3. Relevance to Technical Requirements
How well the Offeror's proposed Initial Delivery system meets or exceeds the target requirements for the Initial Delivery system will be evaluated.

4. Benchmarks
The benchmarks will be used to evaluate Offeror's claims about the robustness of their system and the delivered ASCI application performance.

II. Milestone Scheduling
This evaluation factor deals with "when" the fruits of the accelerated delivery activities will be actualized for ASCI benefit. Factor A is significantly more important than factor B.

A. Project Management Plan

The Offeror's high level project plan and its management will be evaluated for appropriateness of the work breakdown structure, phasing of work, and an organizational structure to coordinate the work.

B. Offeror Schedule Realism

Overall schedule credibility and adherence to high level ASCI milestones will be evaluated. Earlier is better.

III. Management Approach

This evaluation factor deals with "how" the accelerated delivery effort will be accomplished. The proposals will be reviewed to determine the management approach chosen by the Offeror. Evaluation emphasis will be given to the soundness of management practices to be adopted to meet the technical goals of the ASCI Blue contract. The factors listed below are in descending order of importance.

A. Company Qualifications

The Offeror's qualifications will be evaluated in terms of corporate commitment to the ASCI Blue goals and high end computing market in general, demonstrated ability of Offeror to solve problems in scalable systems and manage very large complex projects.

B. Management Plan

The overall management structure and lines of communications within the company and ASCI Blue interfaces (including qualifications of key personnel and on-site maintenance and applications support) will be evaluated.

C. Risk Reduction Plan

The Offeror's proposal will be evaluated in terms of a realistic view of the Offerors limitations and an effective plan to quickly mitigate problems as they arise.

6. Overall Price Evaluation

Each qualified proposal will be evaluated to determine if the proposed prices are realistic for the work to be performed, if the prices reflect the Offeror's understanding of the requirements and if the prices are consistent with the various elements of the proposal. Prices will also be evaluated for reasonableness and probable cost to the University in relation to the work described in the technical proposal. Unrealistically high or low estimates may be viewed as an indication of an Offeror's failure to understand the requirements and scope of the University's needs.

7. Subcontractor Responsibility

Prior to final selection the University will review such indices as the Offeror's financial condition to determine overall Subcontractor Responsibility. A subcontract shall only be awarded to a subcontractor determined to be responsible.

8. Final Selection

Award will be made to that Offeror whose proposal contains the combination of those criteria offering the best overall value to the University. This will be determined by comparing the difference in the value of technical and management features with the differences in cost to the University. In making this comparison, the University is more concerned with obtaining superior technical or management features than with making an award at the lowest overall cost to the University. However, the University will not make an award at a significantly higher overall cost to the University to achieve slightly superior technical or management features.

You are cautioned that the University anticipates selecting the successful offeror or offerors on the basis of initial proposals without discussions with offerors. Therefore, your proposal should initially include the most favorable terms, from a price and technical standpoint, that you can offer. The University reserves the right, without qualification, to negotiate with the successful offeror(s).

9. Multiple Awards

The University anticipates funding will be available for one (1) award as a result of this solicitation. However, should additional funding become available, the University reserves the right to issue two (2) separate subcontracts, each for the total scope of the Statement of Work (SOW). In such event, one contract will be issued by Los Alamos National Laboratory and a second contract will be issued, using the same terms and conditions (with the exception of certain site-specific security access requirements), by Lawrence Livermore National Laboratory. The second subcontract would be awarded to a different subcontractor than the subcontractor who is selected for the first contract. Factors which will have a bearing on whether a second subcontract might be issued include availability of funding and the nature of the Technical Excellence of the proposals received. The issuance of a second subcontract shall be at the sole discretion of the University.